

AMENDMENTS TO THE CLAIMS

Please modify claims 1, 3-5, and 7, cancel claims 2 and 6, and add claims 8-20 as follows:

Sub 317
Claim 1. (Currently Amended) A data carrier (1) which includes comprising:
receiving means (5) for receiving a modulated carrier signal (MTS) which contains a an encoded
data signal (DS1) encoded in conformity with an encoding method (MA, PW, MI, RTZ, FSK,
PSK), and
demodulation means (9) for demodulating the received modulated carrier signal (MTS) and for
outputting the encoded data signal (DS1) contained therein, and
decoding means (10,20) for decoding the encoded data signal (DS1) and for outputting data (D1,
D2), and
data processing means (11) for processing the data (D1, D2) output by the decoding means
(10,20),
characterized in that
the decoding means (10, 20) includes including at least a first decoding stage (12) encoded and a second
decoding stage (13), the first decoding stage (12) being arranged to decode a said data signal
(DS1) encoded in conformity with a first encoding method (RTZ) whereas the second decoding
stage (13) is arranged to decode a said data signal (DS1) encoded in conformity with a second
encoding method (MI), and
a decision stage included in said decoding means and which is arranged to decide which of the
decoding stages is suitable to decode said data signal and wherein before the decision stage can
decide which of the decoding stages is suitable for the decoding of said data signal, data output
by the first decoding stage can be output to the data processing means for further processing.

41
Cont
Claim 2. (Canceled)

Claim 3. (Currently Amended) A data carrier (1) as claimed in Claim 2 1, characterized in that
wherein the decision stage (14) can receive decision supporting information (EUI1, EUI2) from
at least one of the at least two decoding stages (12, 13), and that the decision stage (14) is
arranged to decide, by evaluation of the decision supporting information (EUI1, EUI2) applied
thereto, which of the at least two decoding stages (12, 13) is suitable to decode a received
encoded data signal (DS1).

Claim 4. (Currently Amended) A data carrier (1) as claimed in Claim 2 1, characterized in
that wherein the data carrier (1) is arranged to receive a modulated carrier signal (MTS) which
contains an encoded data signal (DS1) includes containing decoding stage instruction
information (BI), and that the decision stage (14) is arranged to decide, by evaluation of the
decoding stage instruction information (BI) applied thereto, which of the decoding stages (12,
13) is arranged to decode an the encoded data signal (DS1) that can be received next.

Claim 5. (Currently Amended) A data carrier (1) as claimed in Claim 1, characterized in
that wherein the decoding means (10, 20) include includes a storage stage (15) in which a
received the encoded data signal (DS1) can be stored prior to the decoding by one of the at least

two decoding stages (12, 13), or in which data output by at least one of the at least two decoding stages (12, 13) can be stored after the decoding by these decoding stages (12, 13).

Claim 6. (Canceled).

Claim 7. (Currently Amended) A data carrier (1) as claimed in Claim 1, ~~characterized in that the data carrier (1) includes further comprising an~~ encoding means (16) for outputting an encoded data signal (DS2), ~~which said encoding means include including~~ at least a first encoding stage (17) and a second encoding stage (18), ~~the first encoding stage (17) being arranged to encode data (D3) in conformity with a third method (FSK) whereas the second encoding stage (18) is arranged to encode data (D3) in conformity with a fourth method (PSK), that the data carrier (1) includes modulation means (19) which are arranged to modulate the encoded data signal (DS2) output by the encoding means (16) and to output a modulated carrier signal (MTS), and that the data carrier (1) also includes transmission means (5) which are arranged to transmit the modulated carrier signal (MTS).~~

AI
cont
Claim 8. (New) A data carrier as claimed in Claim 7, wherein said first encoding stage is designed to encode data in conformity with a third method and said second encoding stage is designed to encode data in conformity with a fourth method which is different from said third method.

Claim 9. (New) A data carrier as claimed in Claim 1, further comprising modulation means designed to modulate the encoded data signal output by the encoding means.

Claim 10. (New) A data carrier comprising:

a receiver designed to receive a modulated carrier signal which includes an encoded data signal;

demodulator capable of receiving the modulated carrier signal and designed to output the encoded data signal included therein;

decoder designed to decode the encoded data signal and to output data;

data processor designed to process the output data from the decoder;

wherein the decoder includes a first decoding stage and a second decoding stage, the first decoding stage designed to decode the encoded data signal which is encoded in conformity with a first encoding method and the second decoding stage designed to decode the data signal encoded in conformity with a second encoding method; and
encoded

said decoder further including a decision stage which is designed to determine which of the first and second decoding stages is suitable to decode the encoded data signal, wherein said data may be output by the first decoding stage to the data processor before the decision stage determines which of the first and second decoding stages is suitable for decoding of the encoded data signal.

Claim 11. (New Claim) The data carrier of claim 10, wherein the first and second encoding methods are different.

Claim 12. (New Claim) The data carrier of claim 10, wherein the first encoding method is RTZ and the second encoding method is MI.

Sub B17
Claim 13. (New Claim) The data carrier of claim 10, wherein the data is output to the data processor before the decision stage determines which of the first and second decoding stages is suitable for decoding the encoded data signal.

Claim 14. (New Claim) A method comprising:

receiving a modulated carrier signal having an encoded data signal;

demodulating the modulated carrier signal in a demodulator and outputting the encoded data signal contained therein to a decoder;

decoding the encoded data signal and outputting data to a data processor;

processing the data output by the decoder;

wherein the decoding step includes a first decoding stage which decodes the encoded data signal in conformity with a first encoding method and a second decoding stage which decodes the encoded data signal in conformity with a second encoding method; and

wherein the decoding step further includes a decision stage which determines which of the first and second decoding stages is suitable to decode the encoded data signal and data may be output by the first decoding stage to the data processor before the decision stage decides which of the first and second decoding stages is suitable for the decoding of the encoded data signal.

Claim 15. (New Claim) The method of claim 14,

wherein the first and second encoding methods are different.

Sub B17
Claim 16. (New Claim) The method of claim 14,

wherein the data is output by the first decoding stage to the data processor before the decision stage decides which of the first and second decoding stages is suitable for the decoding of the encoded data signal.

Claim 17. (New Claim) The method of claim 14,

wherein the decision stage evaluates decision supporting information to determine which of the

first and second decoding stages is suitable to decode the encoded data signal.

Claim 18. (New Claim). The method of claim 14,

wherein the decoding step further includes a storage stage in which the encoded data signal may be stored prior to the decoding by the first and second encoding stages.

Claim 19. (New Claim) The method of claim 14, further comprising:

a first encoding stage which encodes data in conformity with a third encoding method; and

a second encoding stage which encodes data in conformity with a fourth encoding method.

Claim 20. (New Claim) The method of claim 19, wherein the third encoding method is FSK and the fourth encoding method is PSK.

A1
Cancel